SUPPLEMENTAL REMEDIAL ACTION REPORT
UNIMATIC MANUFACTURING COMPANY
25 SHERWOOD LANE
FAIRFIELD, NEW JERSEY
ISRA CASE NO. E20010335

PREPARED FOR:
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1.00 INTRODUCTION

1.10 PURPOSE AND OBJECTIVE

This report describes the tasks and findings of supplemental soil remediation activities (RAs) performed by GZA GeoEnvironmental, Inc. (GZA) on behalf of Unimatic Manufacturing Corporation (Unimatic), at the property located at 25 Sherwood Lane, in Fairfield, New Jersey (Site), ISRA Case No. E20010335. A Site location map is included as **Figure 1**. This report follows up on previous submittals regarding this Site that have been prepared by GZA, as follows:

- "Preliminary Assessment Report," submitted on February 15, 2002;
- "Site Investigation Report," submitted on February 15, 2002;
- "Underground Storage Tank and Aboveground Storage Tank Closure Report," submitted on January 16, 2002;
- "Remedial Action Report," submitted on March 13, 2002;
- "Remediation Investigation Report/Remedial Action Workplan," submitted on October 29, 2002; and
- "Remedial Investigation Report," submitted on November 5, 2003.

1.20 BACKGROUND

In response to a letter from the New Jersey Department of Environmental Protection (NJDEP) received on April 3, 2003, GZA conducted an extensive supplementary remedial investigation (SRI) at the Site. Numerous boreholes were installed inside and outside the building, and GZA collected one or more samples from those boreholes that did not meet with refusal. **Figure 2** shows the boring and sampling locations.

The soil analytical results confirmed the delineation documented in GZA's RIR dated October 29, 2002 along the former wastewater pipeline on the eastern and northeastern portions of the Site. The investigation also identified three additional locations that contained soil with a PCB concentration above 100 milligrams per kilogram (mg/kg):

- Inside the building in the vicinity of the former floor trenches. No PCB exceedances were identified inside the building below 8.5 feet below grade (bg) or much beyond the former floor trench area. However, vertical and horizontal delineation activities inside the building encountered refusal at numerous locations, especially to the north and west of the former floor trenches. There is a double concrete floor up to 24 inches thick at many locations.

- North of the building, possibly related to the former northern wastewater pipe. The saturated soils on the northern portion of the Site located below 16 feet bg contained PCBs at concentrations above 100 mg/kg. The impacted soils appeared to form a northeast sloping wedge, beginning near the surface along the east portion of the building's northern wall.

- A small isolated area in the northwest corner of the property. The shallow PCB isolated area in the northwest corner of the Site appears unrelated to this sloping wedge of impacted soils.

2.00 REMEDIAL ACTIONS

The following sections discuss the soil remediation activities that were performed at the Site during this mobilization.

2.10 FIELD METHODOLOGIES

The analytical results obtained during the SRI were used to determine the initial limits of each excavation. Each initial excavation was completed partway between samples collected during the SRI that contained total PCBs above and below 100 mg/Kg, both horizontally and vertically.

After these soils were excavated, GZA collected one post-excavation soil sample from the undisturbed soils for every 900 square feet along the bottom of each excavation and every 30 linear feet along the sidewalls. Soil samples were obtained by collecting soil material from the bucket of the excavation equipment and scooping it into an unused aluminum pan using a clean plastic trowel. GZA homogenized the soils in the pan using dedicated sampling equipment, and placed a portion of the soil into laboratory-decontaminated glassware.

The homogenized soil sample was analyzed by an onsite mobile laboratory operated by Streamlined Site Characterization & Closure, Inc. (S_2C_2) of Raritan, New Jersey. Having a screening lab onsite enabled GZA to make quick decisions regarding whether additional excavation was needed in a particular area. S_2C_2 analyzed the samples for Aroclor 1248 in accordance with USEPA SW-846 Method 8082 *modified* (GC-ECD). Aroclor 1248 was selected for analysis because it was the predominant targeted PCB identified during the SRI.

If the S_2C_2 analysis indicated that the soil sample contained Aroclor 1248 at a concentration greater than 80 mg/kg, additional excavation was conducted in that area. Selecting 80 mg/kg as a screening threshold provided a 25% safety margin from the target remediation standard of 100 mg/kg. Another screening sample was collected in the over-excavated area and run through the same screening analysis process, until acceptable screening results were obtained.

If the S_2C_2 analysis indicated that the soil sample did not contain Aroclor 1248 above the screening threshold, a portion of the homogenous soil sample was sent in an ice-packed cooler to Aqua Pro-Tech Laboratories in Fairfield, New Jersey (APL), a New Jersey-certified laboratory (certification #07010), using proper chain-of-custody

procedures, to confirm the screening results. After receipt of acceptable analytical results from APL, each excavation was backfilled and rough graded.

GZA collected a field blank during each day of sampling activity to confirm that the sampling equipment did not cross-contaminate the samples.

During excavation activities, GZA utilized a DataRAM dust monitor to screen for airborne dust particles for health and safety purposes. A decontamination pad on the northwestern portion of the Site was used to decontaminate trucks during the load out of PCB impacted soil. Trucks backed up onto the pad and were power-washed using a pressure hose.

2.20 EXCAVATION ACTIVITIES

This section discusses the remediation activities that were conducted by GZA and its contractor, Environmental Industrial Services Corp. of New Jersey (EISCO) of Carteret, New Jersey, starting on October 27, 2003. The report uses the same layer descriptions of the soils that were used in the SRI report. Layers range from Layer 1, the shallowest depths excavated, to Layer 4, the deepest depths excavated. Please note that the use of layers is for visualization purposes only, and does not imply anything about the stratigraphy of the Site. The APL analytical results from Layers 1 through 4 are shown on **Figures 3 through 6**, and are summarized in **Table 1,** attached. The APL laboratory reports are included as **Appendixes A through D**.

2.20.1 Former AST Area

From October 28 and 30, 2003, soils were excavated in the former AST area, see **Figure 3**. Excavated soils from ground surface to approximately 4.5 feet bg were stockpiled separately to be used as backfill. Soils from the lower portion of Layer 1 were excavated and stockpiled for off-site disposal. GZA collected post-excavation samples RI-PE-1 through RI-PE-4 and SPE-5 through SPE-8 from Layer 1. The following table summarizes depths and PCB concentrations of the soil samples collected in this area.

Table 2.20.1: Former AST Area

Sample ID	Depth collected (feet bg)	Sample Location	S_2C_2 Aroclor 1248 Conc. (mg/kg)	APL Total PCB Conc. (mg/kg)
RI-PE-1	5.0 to 5.5	Southern sidewall	0.32	0.29
RI-PE-2	5.0 to 5.5	Northern sidewall	490	NA
RI-PE-3	7.5 to 8.0	Bottom	<0.99	0.050
RI-PE-4	7.5 to 8.0	Bottom	330	NA
SPE-5	6.5 to 7.0	Northern sidewall	<0.99	0.074

Sample ID	Depth collected (feet bg)	Sample Location	S_2C_2 Aroclor 1248 Conc. (mg/kg)	APL Total PCB Conc. (mg/kg)
SPE-6	6.5 to 7.0	Eastern sidewall	<0.99	0.18
SPE-7	6.5 to 7.0	Eastern sidewall	<0.99	0.042
SPE-8	10.0 to 10.5	Bottom	3.3	6.14

NA = not analyzed

Post-excavation samples RI-PE-2 and RI-PE-4 contained Aroclor 1248 at a concentration above 80 mg/kg, and were not sent to APL. EISCO excavated approximately an additional eight feet north of RI-PE-2, where GZA collected sidewall sample SPE-5. EISCO also excavated below RI-PE-4, and GZA collected bottom sample SPE-8, approximately 2.5 feet below RI-PE-4. Once all of the soil samples met GZA's screening criteria, they were sent to APL, which confirmed the screening analytical results (see the table above).

The final excavation was approximately 14 feet by 50 feet in area, and approximately 8 to 10 feet deep. The excavation extended west to the building, where no sample could be collected. The sidewalls had a total perimeter of approximately 76 feet, and the excavation bottom had an area of approximately 675 square feet.

2.20.2 Former Main Wastewater Pipe Elbow

On October 30, 2003, soils were excavated from the former location where the main wastewater pipe elbowed northward from the building, see **Figure 5**. Soils from Layers 1 and 2 were stockpiled separately to be used as backfill. Soils from the Layer 3 were excavated and stockpiled for off-site disposal. The following table summarizes depths and PCB concentrations of the soil samples collected in this area.

Table 2.20.2: Former Wastewater Pipe Junction

Sample ID	Depth collected (feet bg)	Sample Location	S_2C_2 Aroclor 1248 Conc. (mg/kg)	APL Total PCB Conc. (mg/kg)
SPE-9	18.5 to 19.0	Bottom	<0.99	0.046
SPE-10	15.5 to 16.0	Northwestern sidewall	12.0	98.8

APL's analyses did not identify any total PCB concentrations above 100 mg/kg. The final excavation was approximately 3 feet by 7 feet in area, and approximately 20 feet deep. The excavation sidewall had a total perimeter of approximately 20 feet, with a total bottom sampling area of approximately 21 square feet.

2.20.3 Jersey City Municipal Utilities Authority Property

On October 30, 2003, soils were excavated on the Jersey City Municipal Utilities Authority (JCMUA) Property, located adjacent and to the north of the Site, see **Figure 3**. Although the soils in this area did not exceed State non-residential standards, this remediation was undertaken to avoid the need to deed restrict soils on this neighboring property. Mr. Steve Woods from the JCMUA was present on-Site during excavation and backfilling activities. EISCO excavated soils north to the JCMUA water pipeline to a depth of approximately 8.5 feet bg. GZA collected post-excavation samples SPE-11 through SPE-14 in this area and delivered the samples directly to APL. The following table summarizes depths and PCB concentrations of the soil samples collected in this area.

Table 2.20.3: Jersey City Municipal Utilities Authority Property

Sample ID	Depth collected (feet bg)	Sample Location	APL Total PCB Conc. (mg/kg)
SPE-11	7.5 to 8.0	Northern sidewall	0.43
SPE-12	8.0 to 8.5	Bottom	0.17
SPE-13	7.5 to 8.0	Western sidewall	0.20
SPE-14	7.5 to 8.0	Southern sidewall	0.86

APL's analyses did not identify any total PCB concentrations above residential standards, allowing for unrestricted usage of the adjoining JCMUA property. The final excavation was approximately 30 feet by 5 feet in area and approximately 8.5 feet deep. The excavation total sampling sidewall perimeter was approximately 70 feet, with a total bottom sampling area of approximately 150 square feet.

2.20.4 Former Main Wastewater Pipe

On October 31, 2003, soils were excavated in the area of the former main wastewater pipe, see **Figures 5 and 6**. Excavation proceeded from south to north, with separate sets of post-excavation samples collected from the north excavation cell and the south excavation cell. Soils from Layers 1, 2, and part of 3 were stockpiled separately to be used as backfill.

Each excavation was approximately 10 feet by 40 feet in area. The southern cell was approximately 19.5 feet deep and the northern cell was approximately 23 feet deep, both well into the water table, which was encountered at approximately 16 to 17 feet bg. In the course of excavation, monitoring well MW-2, located in the middle of this area, had to be destroyed. The following table summarizes depths and PCB concentrations of the soil samples collected in this area.

Table 2.20.4: Former Main Wastewater Pipe

Sample ID	Depth collected (feet bg)	Sample Location	S_2C_2 Aroclor 1248 Conc. (mg/kg)	APL Total PCB Conc. (mg/kg)
SPE-15	16.5 to 17.0	Eastern sidewall	0.85	1.78
SPE-16	16.5 to 17.0	Southern sidewall	<0.99	0.075
SPE-17	19.0 to 19.5	Bottom	2.1	2.22
SPE-18	22.5 to 23.0	Bottom	0.69	0.85
SPE-19	20.0 to 20.5	Western sidewall	<0.99	0.31
SPE-20	20.0 to 20.5	Southern sidewall	<0.99	0.84
SPE-21	15.5 to 16.0	Eastern sidewall	6.9	3.37
SPE-22	19.0 to 19.5	Bottom	30.0	39.8
SPE-23	22.5 to 23.0	Bottom	410	291
SPE-24	20.0 to 20.5	Western sidewall	83.0	NA
SPE-25	15.5 to 16.0	Eastern sidewall	170	NA
SPE-26	15.5 to 16.0	Northern sidewall	760	NA
SPE-27	20.0 to 20.5	Western sidewall	48.0	55.4
SPE-28	20.0 to 20.5	Northern sidewall	50.0	74.5
SPE-29	15.5 to 16.0	Eastern sidewall	<0.99	0.64
SPE-30	15.5 to 16.0	Northern sidewall	<0.99	0.28

Post-excavation samples SPE-24 through SPE-26 contained Aroclor 1248 at a concentration above 80 mg/kg, and were not sent to APL. EISCO excavated approximately five feet west of SPE-24, where GZA collected sidewall sample SPE-27, and excavated approximately 10 feet north of SPE-25, where GZA collected sidewall sample SPE-26. Since SPE-26 also contained Aroclor 1248 at a concentration above 80 mg/kg, EISCO excavated approximately 5 feet north of SPE-26, where GZA collected sidewall sample SPE-30. Bottom sample SPE-23 did not meet GZA's screening criteria. However, the excavating equipment could not dig deeper than 23 feet bg without the risk of losing the equipment, and GZA stopped the excavating activities at that depth.

The final excavation was approximately 22 feet by 70 feet in area, and was 19.5 feet to 23 feet deep. The excavation had a total sidewall perimeter of approximately 190 feet, and the bottom of the excavation was approximately 1,540 square feet in area.

The soil samples that met GZA's screening criteria and soil sample SPE-23 were sent to APL for analysis. With the exception of soil sample SPE-23, which contained total PCBs at a concentration of 291 mg/kg, APL's analyses did not identify any total PCB concentrations above 100 mg/kg.

2.20.5 Former Northern Wastewater Pipe - Northwestern Portion

On November 6, 2003, soils were excavated from an area in the northwest portion of the Site, see **Figure 3**. The following table summarizes depths and PCB concentrations of the soil samples collected in this area.

Table 2.20.5: Former Northern Wastewater Pipe - Northwestern Portion

Sample ID	Depth collected (feet bg)	Sample Location	S_2C_2 Aroclor 1248 Conc. (mg/kg)	APL Total PCB Conc. (mg/kg)
SPE-31	3.5 to 4.0	Southeastern sidewall	18.0	26.6
SPE-32	3.5 to 4.0	Northwestern sidewall	<0.99	0.26
SPE-33	10.0 to 10.5	Bottom	24.0	33.7

The final excavation dimensions were approximately 8 feet wide, by 8 feet long, by 10.5 feet deep. The excavation had a sidewall perimeter of approximately 32 feet and a bottom area of approximately 64 square feet. APL's analyses did not identify any total PCB concentrations above 100 mg/kg.

2.20.6 Downward Sloping Wedge North of the Building

On November 7, 2003, EISCO began to excavate the downward sloping wedge of impacted soils discussed in the SRI report, see **Figures 3, 4, and 6**. The wedge was excavated in two phases. In the first phase, soils were excavated northward from the northern wall of the building. The southern cell was excavated to a depth of approximately 9.5 feet bg, and the northern cell was excavated to a depth of approximately 10.5 feet bg. The southern excavation cell had an area of approximately 35 feet by 16 feet, and the northern excavation cell had an area of approximately 22 feet by 30 feet in area. The following table summarizes depths and PCB concentrations of the soil samples collected in this area for this phase.

Table 2.20.6a: Downward Sloping Wedge North of the Building – First Phase

Sample ID	Depth collected (feet bg)	Sample Location	S_2C_2 Aroclor 1248 Conc. (mg/kg)	APL Total PCB Conc. (mg/kg)
SPE-34	9.0 to 9.5	Bottom	4.0	3.15
SPE-35	3.5 to 4.0	Northeastern sidewall	150	NA
SPE-36	3.5 to 4.0	Western sidewall	40.0	43.5
SPE-37	3.5 to 4.0	Western sidewall	3.9	68.0
SPE-38	9.0 to 9.5	Northwestern sidewall	0.32	13.0
SPE-39	9.0 to 9.5	Northern sidewall	950	NA
SPE-40	9.0 to 9.5	Northeastern sidewall	640	NA

Sample ID	Depth collected (feet bg)	Sample Location	S_2C_2 Aroclor 1248 Conc. (mg/kg)	APL Total PCB Conc. (mg/kg)
SPE-41	10.0 to 10.5	Bottom	<0.99	1.99
SPE-42	9.0 to 9.5	Northeastern sidewall	66.0	155
SPE-43	9.0 to 9.5	Northern sidewall	0.09	13.9

In the second phase, soils were removed from a limited area to a depth of approximately 19 feet and were stockpiled onsite to be used as backfill. Impacted soils were excavated to a depth of approximately 22.5 feet bg in the center of this excavation. The final excavation for this phase was approximately 6 feet by 6 feet in area and approximately 19.5 feet deep. The following table summarizes depths and PCB concentrations of the soil samples collected in this area.

Table 2.20.6c: Downward Sloping Wedge North of the Building – Second Phase

Sample ID	Depth collected (feet bg)	Sample Location	S_2C_2 Aroclor 1248 Conc. (mg/kg)	APL Total PCB Conc. (mg/kg)
SPE-44	22.0 to 22.5	Bottom	25.0	14.3
SPE-45	19.5 to 20.0	Southern sidewall	4.0	4.51
SPE-46	19.5 to 20.0	Northern sidewall	32.0	39.7

APL's analyses did not identify any total PCB concentrations above 100 mg/kg, except for soil sample SPE-42, which had a total PCB concentration of 155 mg/kg. GZA learned of the discrepancy between the screening and confirmation analyses for SPE-42 after EISCO had demobilized, and was unable to over-excavate that area as part of the remedial activities documented in this report.

2.30 SOIL STOCKPILING AND DISPOSAL

Excavated soils were stockpiled on and beneath 6-mil-thick impermeable polyethylene sheeting. The soil stockpile was constructed to divert storm water runoff from the stockpile area. It was covered, overlapped, and weighted to form a continuous waterproof barrier over the material prior to the onset of precipitation and at the end of each work day.

EISCO loaded the stockpiled soils into properly licensed and permitted vehicles that transported the soils to the CWM disposal facility located in Model City, New York. In all, 2,102.48 tons of impacted soils were excavated and disposed of off-site as part of the scope of work documented in this report. The signed hazardous waste manifests are provided in **Appendix E**.

2.40 BACKFILL AND RESTORATION

The excavations were backfilled to approximately two feet bg using certified clean bank run sand, then were graded to the surface with ¾-inch stone and compacted with a ten-ton roller. Clean fill certificates are included in **Appendix F**.

3.00 CONCLUSIONS AND RECOMMENDATIONS

3.10 CONCLUSIONS

From October 27 to November 21, 2003, 2,102.48 tons of PCB-impacted soils were excavated and disposed of off-site. The excavated soils contained total PCB concentrations above 100 mg/kg, as discussed in GZA's letter to the NJDEP dated August 20, 2003. The extent of PCB-impacted soils had been determined in the supplemental remedial investigation conducted at the Site and documented in the GZA report dated November 5, 2003. Post-excavation soil samples from the six excavation areas confirmed the effectiveness of the excavation activities, except for the following two post-excavation samples:

- Bottom soil sample SPE-23, located at 23 feet bg. The excavation equipment could not dig deeper into the water table at this location. Nearby soil sample SB-56, collected at a depth of 25.0 to 25.5 feet bg during the supplemental remedial investigation, contained total PCBs at a concentration of 1.9 mg/kg. Therefore, it is likely that no more than a two-foot layer of PCB-impacted soils remain at this location.

- Sidewall soil sample SPE-42. GZA will return to this area in the future to over-excavate the sidewall from which soil sample SPE-42 was collected, until a soil sample collected from this sidewall contains total PCBs at a concentration below 100 mg/kg.

The other remaining exterior area that contains PCB-impacted soils is the lower portion of the descending wedge of soils on the northern side of the Site. Soils containing total PCBs at a concentration above 100 mg/kg still remain below the water table at depths of 23 to 32 feet bg. The maximum concentration of PCBs in soils at these depths is 234 mg/kg.

As part of the scope of work, GZA successfully remediated the soils to the residential standard for total PCBs on the adjoining property to the north. No excavation was needed on the adjoining property to the east, as acceptable post-excavation samples were collected along the property boundary during excavation activities.

3.20 RECOMMENDATIONS

GZA recommends completing the excavation southward from sidewall sample SPE-42. Due to the inaccessibility of the other, deeper soils with total PCB concentrations greater than 100 mg/kg, GZA recommends assessing groundwater conditions in these areas through the installation of additional monitoring wells to determine whether current PCB levels have degraded the groundwater at these locations. These new wells, along with the existing wells, will also be utilized to assess whether PCBs in concentrations from 50 to 100 mg/kg, which have been left in the soils as proposed in our August 20, 2003 letter, are impacting the groundwater. The location and construction of the new proposed monitoring wells are described below. **Figure 7** shows the proposed location of the monitoring wells.

- MW-4, at the location of post-excavation soil sample SPE-23, which contained total PCBs at a concentration of 291 mg/kg. The well will be screened from 15 to 25 feet bg, to encompass both the water table and the soil interval containing total PCBs above 100 mg/kg. This well will also replace MW-2 so that groundwater flow direction can be measured.

- MW-5, at the location of borehole soil sample SB-84, where soils containing total PCBs above 100 mg/kg were encountered between 23.5 and 29.0 feet bg. The well will be screened from 23 to 33 feet bg, which is below the water table. It will not be used to determine groundwater flow direction.

The wells will be sampled using low-flow purging techniques as approved in the NJDEP's July 24, 2003 letter. In addition, GZA will collect groundwater samples without any purging and analyze those samples for PCBs as well. Since PCBs have an extremely low vapor pressure[1], and do not readily sorb to the materials used to construct the onsite monitoring wells, there is unlikely to be a measurable difference between PCB concentrations from formation water and from standing water inside the borehole.

Based on the analytical results from the groundwater sampling, we will assess the need to remediate the soils at the Site to a concentration below 100 mg/kg. If PCB concentrations in groundwater do not exceed the Ground Water Quality Criteria (GWQC) of .5 micrograms per liter, GZA will recommend that the State grant a no further action status regarding PCBs at the Site.

[1] 4.49×10^{-4} for Aroclor 1248, according to the Oak Ridge National Laboratories web site (http://rais.ornl.gov/cgi-bin/tox/TOX_9801)

Table 1: Post-Excavation PCB Soil Analytical Results
Former Unimatic Manufacturing Co. Facility
25 Sherwood Lane, Fairfield, New Jersey

Sample ID	RI-PE-1	RI-PE-3	SPE-5	SPE-6	SPE-7	SPE-8	SPE-9	SPE-10
Date Collected	10/28/03	10/28/03	10/28/03	10/30/03	10/30/03	10/30/03	10/30/03	10/30/03
Depth Collected	5.0 to 5.5	7.5 to 8.0	6.5 to 7.0	6.5 to 7.0	6.5 to 7.0	10.0 to 10.5	18.5 to 19.0	15.5 to 16.0
Percent Solids	86.0%	89.0%	89.0%	85.0%	87.0%	85.0%	85.0%	88.0%
Dilution Factor	1	1	1	1	1	20	1	500
PCB (mg/Kg)								
Aroclor 1242	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1248	0.24	0.050	0.074	0.18	0.042	5.38	0.046	91.2
Aroclor 1254	0.049	ND	ND	ND	ND	0.76	ND	7.65
Aroclor 1260	ND	ND	ND	ND	ND	ND	ND	ND
Total PCBs	0.29	0.050	0.074	0.180	0.042	6.14	0.046	98.9

Sample ID	SPE-11	SPE-12	SPE-13	SPE-14	SPE-15	SPE-16	SPE-17	SPE-18
Date Collected	10/30/03	10/30/03	10/30/03	10/30/03	10/31/03	10/31/03	10/31/03	10/31/03
Depth Collected	7.5 to 8.0	8.0 to 8.5	7.5 to 8.0	7.5 to 8.0	16.5 to 17.0	16.5 to 17.0	19.0 to 19.5	22.5 to 23.0
Percent Solids	78.0%	78.0%	80.0%	80.0%	87.0%	84.0%	86.0%	85.0%
Dilution Factor	1	1	1	1	5	1	10	5
PCB (mg/Kg)								
Aroclor 1242	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1248	0.36	0.15	0.17	0.75	1.65	0.075	2.03	0.78
Aroclor 1254	0.069	0.027	0.031	0.11	0.14	ND	0.19	0.079
Aroclor 1260	ND	ND	ND	ND	ND	ND	ND	ND
Total PCBs	0.43	0.18	0.20	0.86	1.79	0.075	2.22	0.86

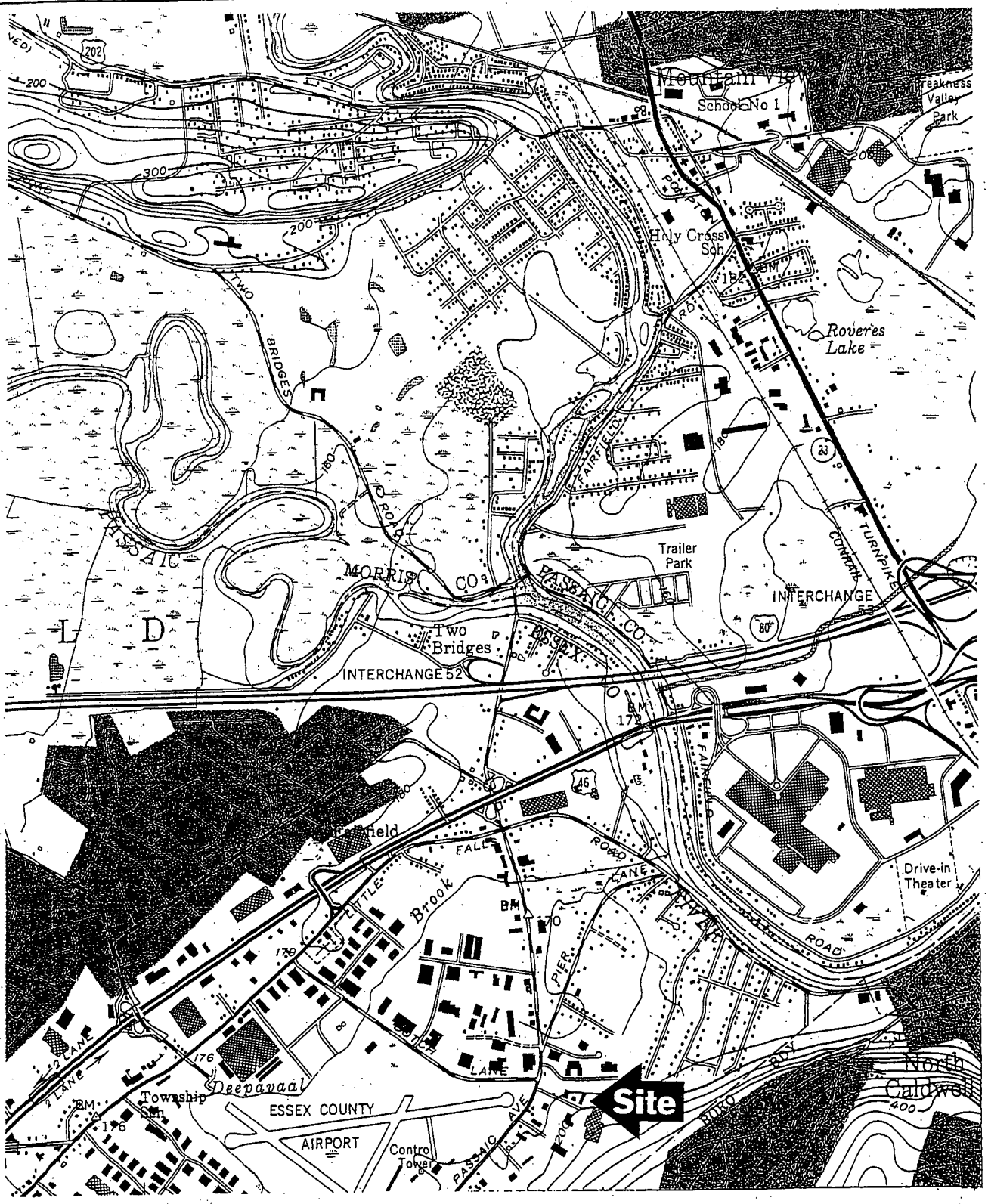
Sample ID	SPE-19	SPE-20	SPE-21	SPE-22	SPE-23	SPE-27	SPE-28	SPE-29
Date Collected	10/31/03	10/31/03	11/3/03	11/3/03	11/3/03	11/4/03	11/4/03	11/4/03
Depth Collected	20.0 to 20.5	20.0 to 20.5	15.5 to 16.0	19.0 to 19.5	22.5 to 23.0	20.0 to 20.5	20.0 to 20.5	15.5 to 16.0
Percent Solids	82.0%	83.0%	83.0%	84.0%	86.0%	87.0%	83.0%	89.0%
Dilution Factor	1	5	10	200	2000	200	250	10
PCB (mg/Kg)								
Aroclor 1242	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1248	0.27	0.70	3.04	37.7	261	53.5	70.9	0.64
Aroclor 1254	0.034	0.15	0.34	2.08	30.1	1.93	3.54	ND
Aroclor 1260	ND	ND	ND	ND	ND	ND	ND	ND
Total PCBs	0.31	0.84	3.37	39.8	291	55.4	74.5	0.64

Table 1: Post-Excavation PCB Soil Analytical Results
Former Unimatic Manufacturing Co. Facility
25 Sherwood Lane, Fairfield, New Jersey

Sample ID	SPE-30	SPE-31	SPE-32	SPE-33	SPE-34	SPE-36	SPE-37	SPE-38
Date Collected	11/4/03	11/6/03	11/6/03	11/6/03	11/7/03	11/7/03	11/7/03	11/11/03
Depth Collected	15.5 to 16.0	3.5 to 4.0	3.5 to 4.0	10.0 to 10.5	9.0 to 9.5	3.5 to 4.0	3.5 to 4.0	9.0 to 9.5
Percent Solids	89.0%	85.0%	83.0%	84.0%	88.0%	87.0%	85.0%	84.0%
Dilution Factor	10	100	1	100	10	100	200	50
PCB (mg/Kg)								
Aroclor 1242	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1248	0.28	20.9	0.17	27.7	2.23	34.7	43.2	10.4
Aroclor 1254	ND	5.72	0.093	5.97	0.92	8.78	24.9	2.64
Aroclor 1260	ND	ND	ND	ND	ND	ND	ND	ND
Total PCBs	0.28	26.6	0.26	33.7	3.15	43.5	68.0	13.0

Sample ID	SPE-41	SPE-42	SPE-43	SPE-44	SPE-45	SPE-46
Date Collected	11/11/03	11/11/03	11/11/03	11/12/03	11/12/03	11/12/03
Depth Collected	10.0 to 10.5	9.0 to 9.5	9.0 to 9.5	22.0 to 22.5	19.5 to 20.0	19.5 to 20.0
Percent Solids	86.0%	85.0%	84.0%	86.0%	87.0%	86.0%
Dilution Factor	10	500	100	50	10	100
PCB (mg/Kg)						
Aroclor 1242	ND	ND	ND	ND	ND	ND
Aroclor 1248	1.63	127	11.5	12.1	3.67	32.6
Aroclor 1254	0.36	28.4	2.45	2.23	0.84	7.07
Aroclor 1260	ND	ND	ND	ND	ND	ND
Total PCBs	1.99	155	14.0	14.3	4.51	39.7

Notes:
Black shaded results exceed 100 mg/kg
ND = Not Detected
mg/Kg = milligrams per kilogram



DESCRIPTION/NOTES	UNIMATIC MANUFACTURING COMPANY 25 SHERWOOD LANE FAIRFIELD, NEW JERSEY 07004	PROJECT NO. 12.0075418.00
Scale = 1 : 24,000 MAP TAKEN FROM THE POMTON PLAINS QUADRANGLE, DATED 1955, PHOTOREVISED 1981		FIGURE NO. Figure 1

GZA GeoEnvironmental, Inc. 65 Willowbrook Blvd., Wayne, New Jersey 07470	NOTES: PROJECT MGR: BA DESIGNED BY: CS REVIEWED BY: BD DRAWN BY: CS DATE: 7/3/01	SITE LOCATION MAP

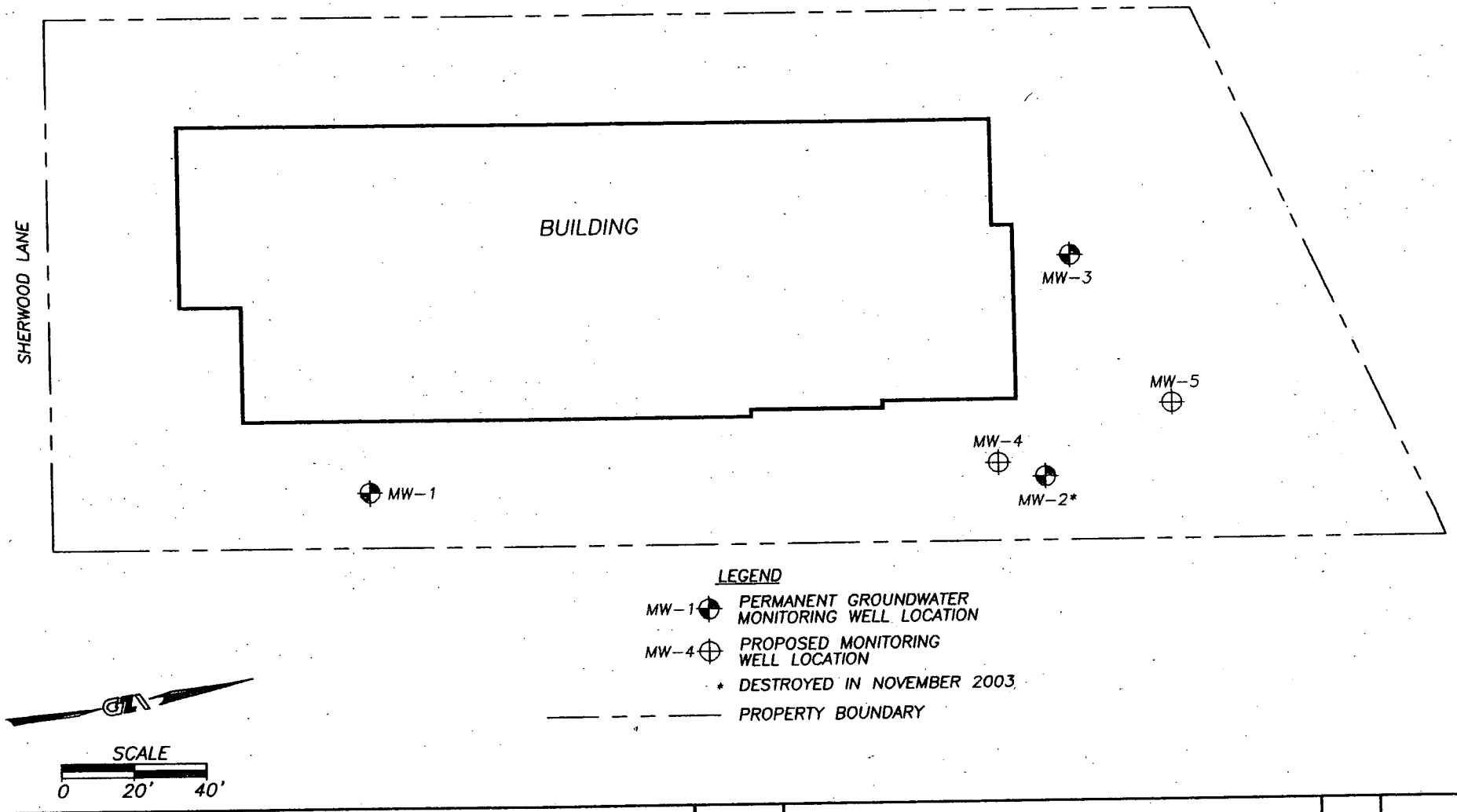


FIGURE NO. 6

PROJECT NO. 12.0075418.00

Unimatic Manufacturing Company

25 Sherwood Lane (Block 2302, Lot 8)
Fairfield, NJ 07004

Proposed Monitoring Well Locations

REV. NO.	DESCRIPTION	BY	DATE

PROJECT MGR: B.A. OPERATOR: E.M.
DESIGNED BY: C.S.
REVIEWED BY: B.A. DATE: 1/30/200

GZA
GeoEnvironmental, Inc.